

**REMARKS**

Reconsideration of this application as amended is respectfully requested.

Claims 1-32 remain in the application. Claims 1 and 12 are in independent form.

**ELECTION AND RESTRICTION ISSUES**

The applicant hereby affirms its prior oral election to prosecute the invention of Species I, claims 1-24, 31 and 32, if a generic claim is not available. However, the applicant traverses the restriction requirement and the conclusion that claim 12 is not generic to both Species I and II. Specifically, the restriction requirement is predicated on the conclusion that claim 12 does not read on Species I because the end cap 132 in Species I is not attached to the distal end 84 of the projection 82. This, however, is not a correct interpretation of the applicants' invention as described. The applicants have carefully defined and presented the structural features of their invention so that the housing 130 is identified as being "integral with" the projection 82. (See paragraph 041 in line 5). Additionally, Figures 3 and 4 show, by cross section through the projection 82, that the housing 130 is integral with, and thus part of, the projection 82. This is precisely consistent with the meaning of the third sentence in applicants' paragraph 041, and the most reasonable interpretation. Accordingly, claim 12 is generic to both Species of the invention via the end cap 132 which is attached to the distal end 84 of the projection 82, which distal end 84 is integral with the housing 130.

In support of the patentability of generic claim 12, the applicant respectfully submits that the prior art fails to disclose and/or suggest all of the features recited in

combination therein. Accordingly, it is respectfully submitted that claim 12 is generic to both Species I and II, and in condition for allowance.

### THE CLAIM REJECTIONS

Claims 1-3 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Cienfuegos '592 in view of Bowerman '958.

Cienfuegos discloses an adjustable bicycle seat post assembly controlled by a manual, plunger-type pin latching device. Cienfuegos '592 is especially focused on its pin latch mechanism and accordingly fails to provide any suggestion or motivation that the latch feature could or should be substituted by any other type of arrangement.

Bowerman '958 discloses a magnetic lock device in which a rotating bar magnet 28 controls the movements of two locking magnets 20, 22 and associated keeper magnets 34, 36. The keeper magnets 34, 36 prevent extraction of the locking magnets 20, 22 from a locked condition until the control magnet 28 has been rotated 180°. This unusual device is suggested for use on a smooth, flat, non-ferrous (e.g., wood) engagement surface so that its opposed locking magnets can align with corresponding sockets. Sailboat rigging (column 2:55) and door latches (column 3:5) are the only described applications. There is no suggestion or motivation in Bowerman '958 to adapt this fanciful magnetic lock to a metallic tubular structure of any kind, especially not a bicycle seat post which may contain ferrous materials anathema to a magnetic latch of the Bowerman type.

It is respectfully submitted that these references are insufficient to establish a *prima facie* case of obviousness. First, neither reference provides a suggestion or

motivation for the modifications required to achieve claim 1 of the subject application.

Second, even if the references could be combined or modified in the manner suggested by the Examiner, there would be no reasonable expectation of success. Finally, a *prima facie* case of obviousness requires the prior art references, when combined, teach or suggest all of the claim limitations.

Addressing these criteria in greater detail, the Applicant respectfully demonstrates that a *prima facie* case of obviousness has not been established.

Concerning the lack of suggestion or motivation in either of these references to modify or combine their teachings, the applicants respectfully point to the Cienfuegos '592 technical description which is focused upon the novelty of its spring-loaded pin latch arrangement. This feature is the heart of the inventive concept in Cienfuegos '592. The prior art cited in the Cienfuegos Background section identifies other spring-loaded latch devices as well as screw mechanisms. Cienfuegos '592 argues strenuously against any replacement or modification of its manual plunger locking device. Thus, no motivation can be identified within the 4-corners of Cienfuegos '592 sufficient to lead one skilled in the art to seek a replacement latch of any type.

Bowerman '958 likewise fails to suggest the necessary combination. Given, Bowerman '958 may indicate its usefulness in other unspecified applications (column 2:55), adjustable bicycle seat post assemblies are not one such application and a direct substitution of components could not be accomplished without substantial re-inventive activity. Of particular concern is Bowerman's need to apply the magnetic latch to non-ferrous members. Wood is illustrated, and this is consistent with the only described applications of sailboat rigging and doors. Due to Bowerman's delicate use of locking

magnets 20, 22 and keeper magnets 34, 36, they would be ineffective in applications with high ferrous content which is the case in some bicycles.

Adjustable bicycle seat post assemblies have been known and used for many years, as evidenced by the numerous prior art references already made of record in this application. Prior to the applicant's invention, however, no one had thought to employ a magnetic switch to control a latch member in an adjustable seat post assembly. In fact, the prior art can be seen to be stuck in a rut of mechanical latching configurations only. The fact that applicants were not the originator of the magnetic switch concept does not bar their entitlement to a patent as the originators of its novel application to a bicycle seat post. Accordingly, it is respectfully submitted that the prior art, and particularly Cienfuegos '592 and Bowerman '958, fail to suggest or motivate the modification of either device as described in the Office Action. These references also do not support the combination of their teachings.

Even if it were suggested to substitute the manual plunger latching device of Cienfuegos '592 with the Bowerman '958 latch mechanism, there would be no reasonable expectation that such a device would be successful. Several reasons support this conclusion. First, the Bowerman '958 lock mechanism would be nearly impossible to operate while riding a bicycle. Adjustable seat assemblies like that of the subject invention are used in racing conditions and especially when climbing or descending steep hills. The Bowerman '958 latch could not realistically be rotated precisely 180° under such conditions to unlatch the seat post and then rotated again precisely 180° to re-latch. Another reason why there would be no reasonable expectation of success using the Bowerman '958 magnetic lock device in the context of a Cienfuegos seat post assembly

is that Bowerman requires a planar surface against which the sliding mechanism of the latch operates. Two spaced sockets must be formed in this planar surface for the locking magnets 24, 26 to seat. No such planar surface exists in the typical seat post assembly. Furthermore, the extremely harsh, jarring conditions of a bicycle race would quickly unseat the locking magnets 24, 26. Furthermore, the locking magnets 24, 26, being made of a typical ferromagnetic, material would be extremely soft and incapable of sustaining the foreseeable shearing forces. By contrast, the latch in an adjustable bicycle seat post assembly must be extremely durable as it supports the weight of a rider under very harsh, jarring conditions. The Bowerman '958 latch is simply not capable of operating within this type of environment, and thus could not be reasonably expected to succeed.

Accordingly, it is respectfully submitted that a prima facie case of obviousness has not been established using the Cienfuegos '592 and Bowerman '958 references. Claims 1-3, as amended, are thus believed to be in condition for allowance.

#### NON-SUBSTANTIVE AMENDMENTS

The Examiner has identified numerous informalities in the specification, claims and drawings which the applicant has herein addressed.

Correction of the various reference numerals and lead lines identified in the Office Action have been addressed in each and every instance. The accompanying red line correction to drawing figures 3, 4, 5, 8, 9, 10, 12, 13, 14, 15 and 16 identify the changes that have been made as reflected in the enclosed replacement figures.

CONCLUDING REMARKS

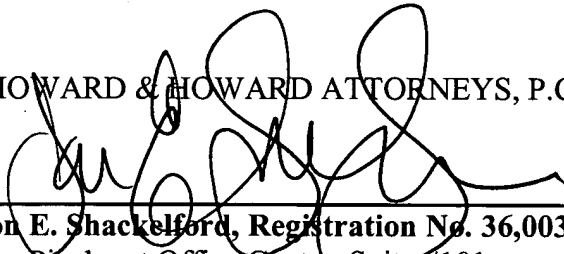
Accordingly, it is respectfully submitted that the prior art, and Cienfuegos '592 and Bowerman '958 in particular, fail to suggest the novel combination of features as recited in independent claim 1. The rejection under 35 U.S.C. §103 is thus understood to have been overcome. Furthermore, the restriction requirement is also believed to have been successfully traversed in view of an informed interpretation of the housing 130 being integral with, and thus part of, the distal end 84 of the projection 82 to which the end cap 132 is attached.

It is believed that this application now is in condition for allowance. Further and favorable action is requested.

The Patent Office is authorized to charge or refund any fee deficiency or excess to Deposit Account No. 08-2789.

**Respectfully submitted,**

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3-30-05  
Date

**AMENDMENTS TO THE DRAWINGS**

Attached are replacement drawing sheets along with accompanying red line correction to drawing figures 3, 4, 5, 8, 9, 10, 12, 13, 14, 15 and 16 identify the changes that have been made as reflected in the enclosed replacement figures.

Attachment: Replacement Sheets  
Annotated Sheet Showing Changes

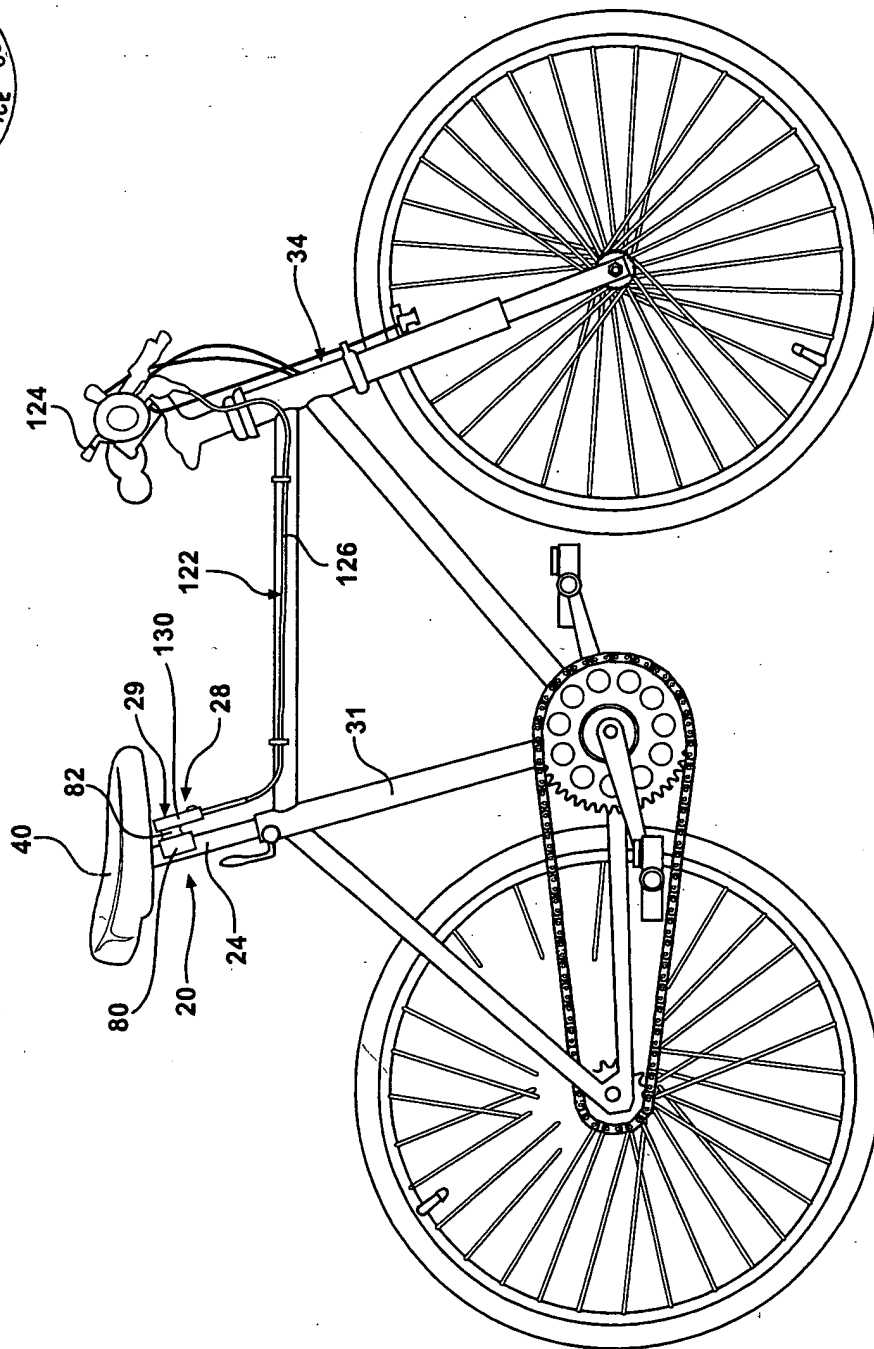
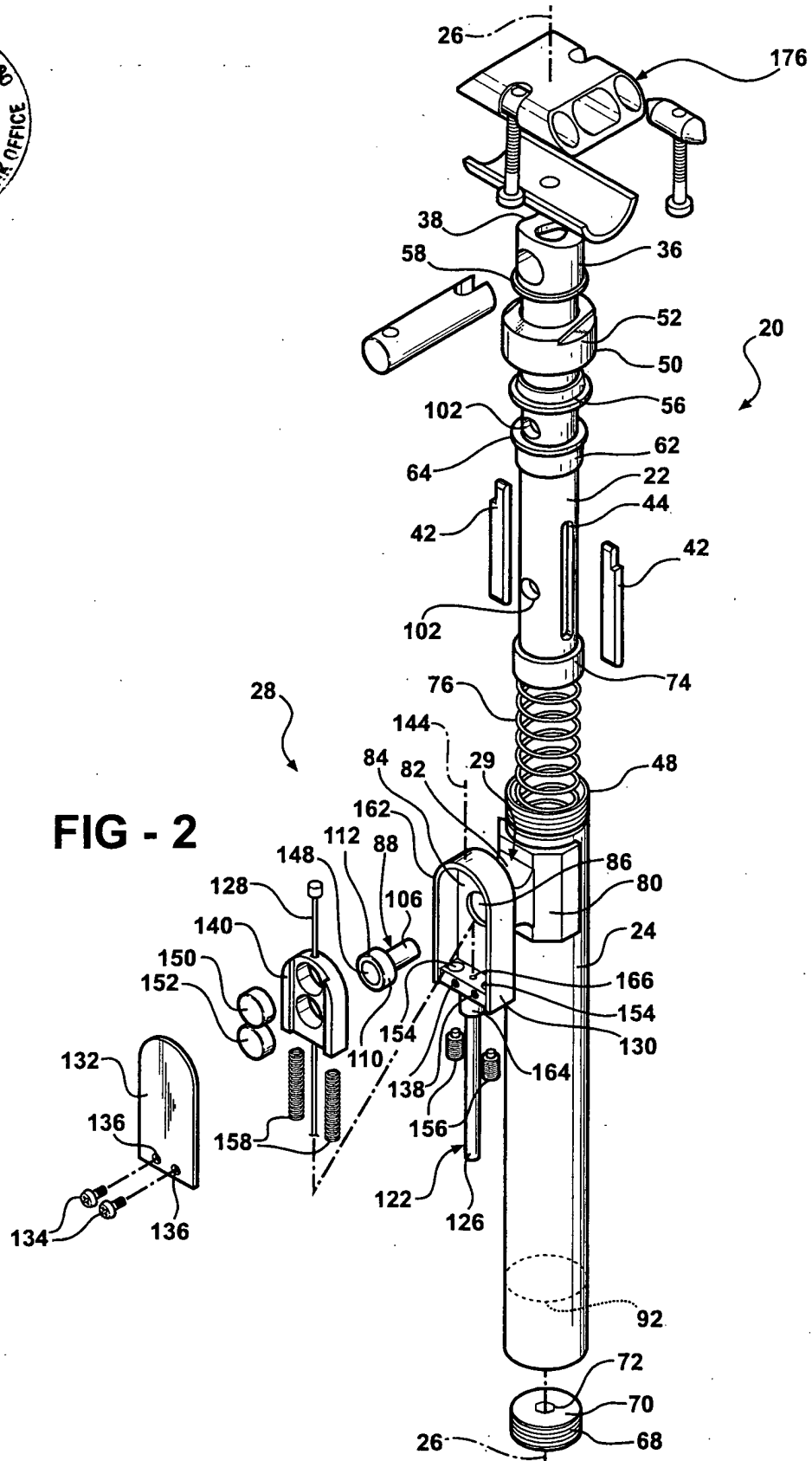
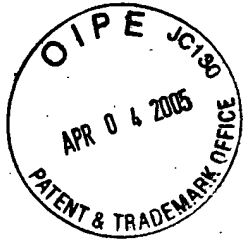
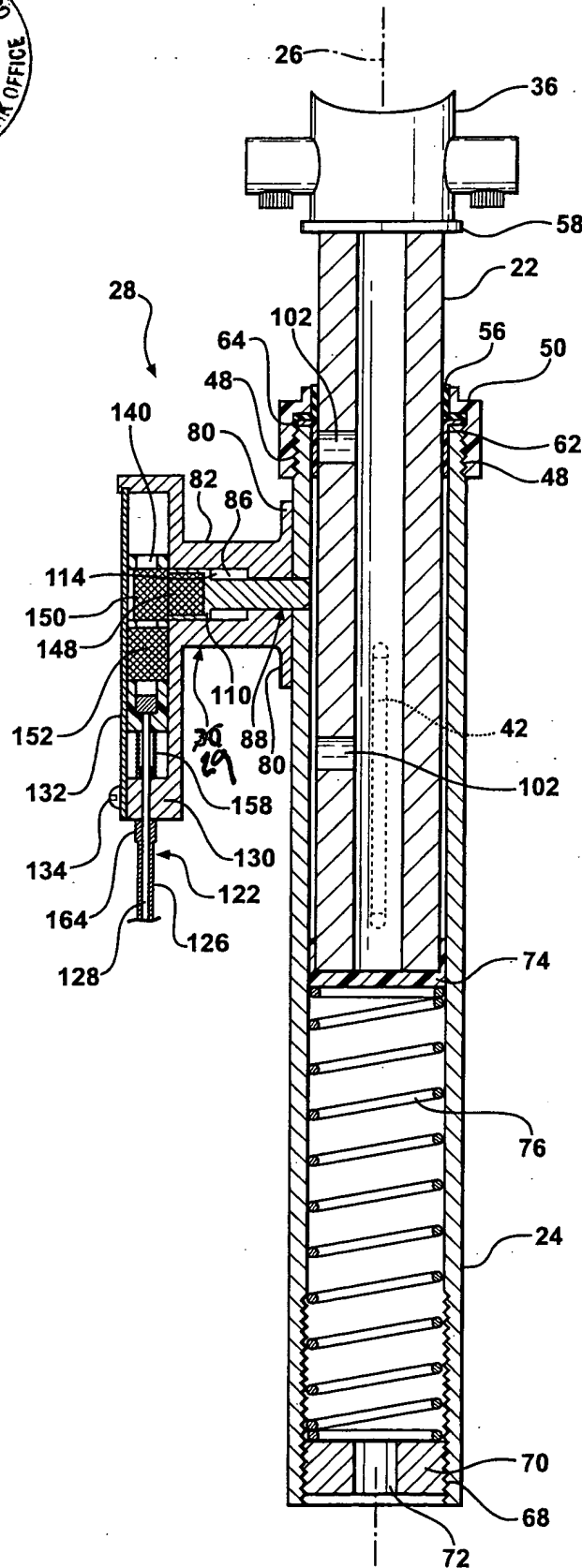


FIG - 1

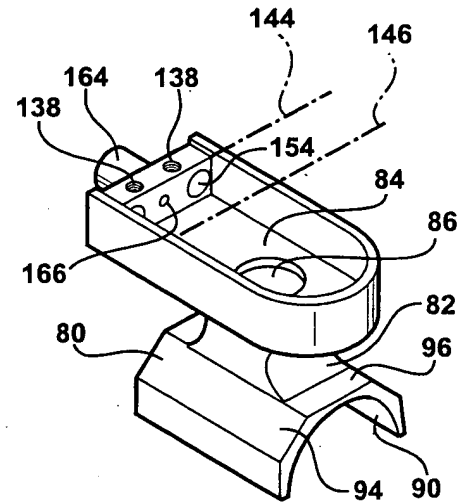




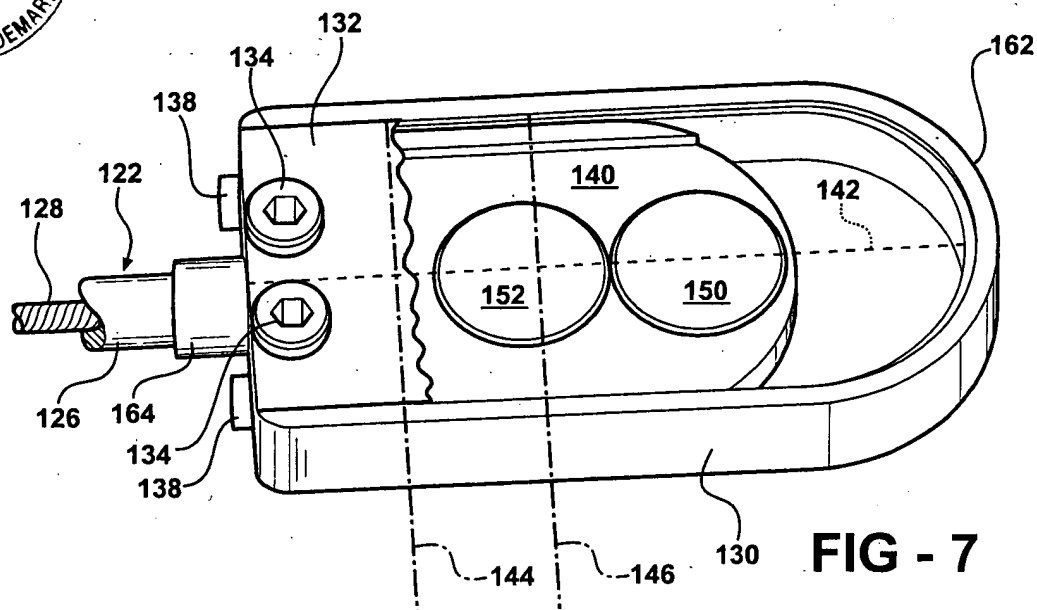
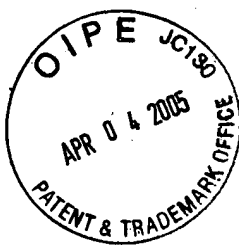
**FIG - 2**



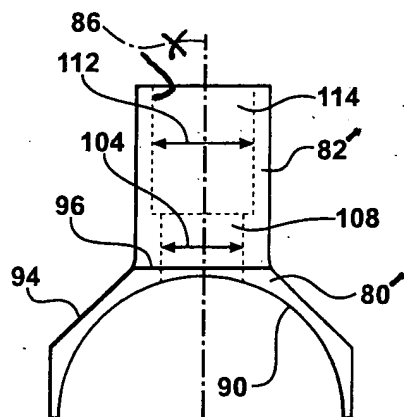
**FIG - 5**



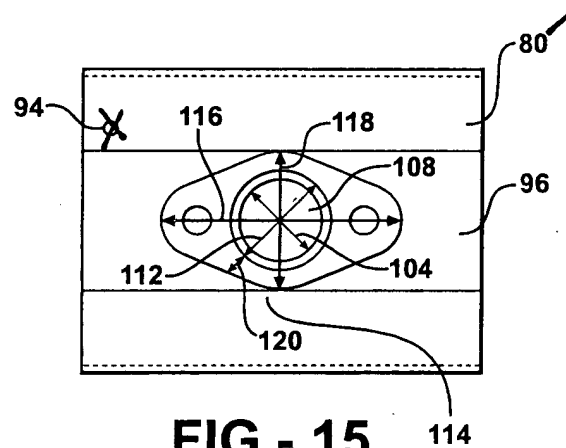
**FIG - 6**



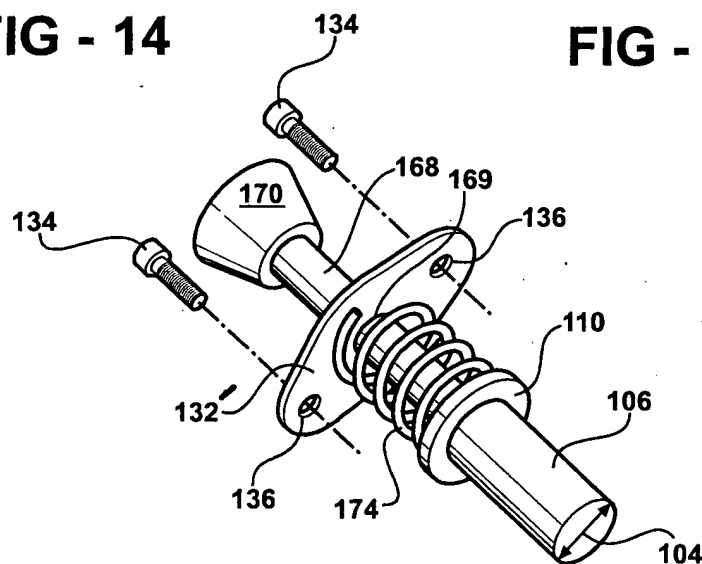
**FIG - 7**



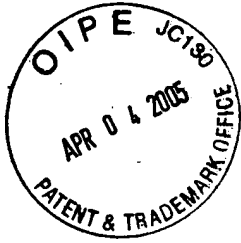
**FIG - 14**



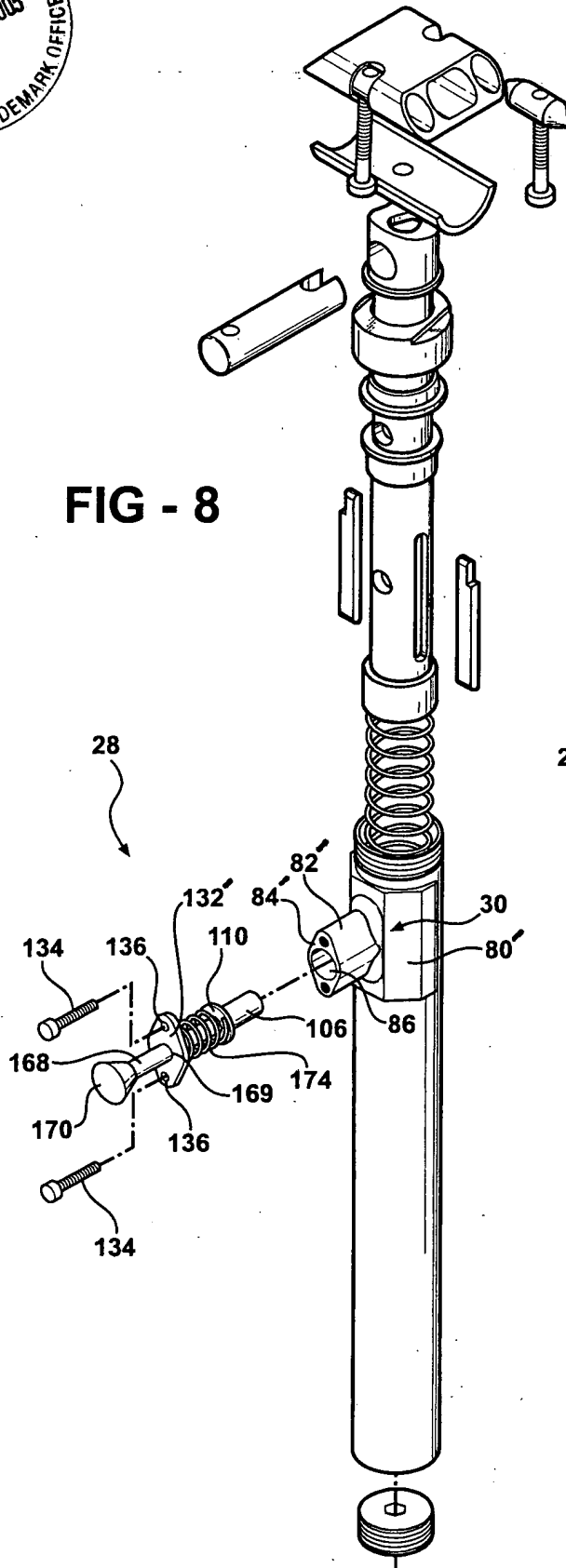
**FIG - 15**



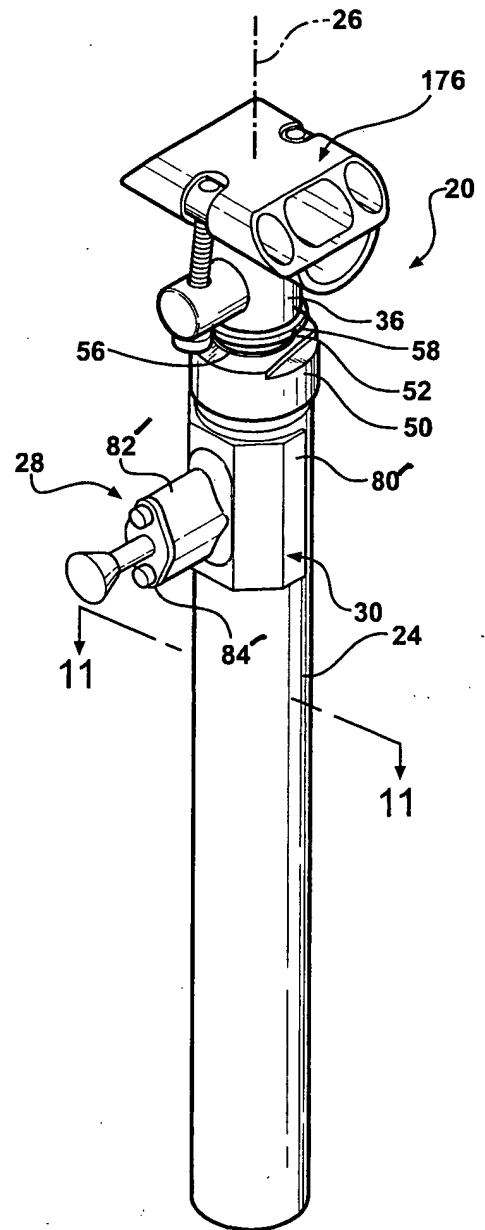
**FIG - 16**



**FIG - 8**

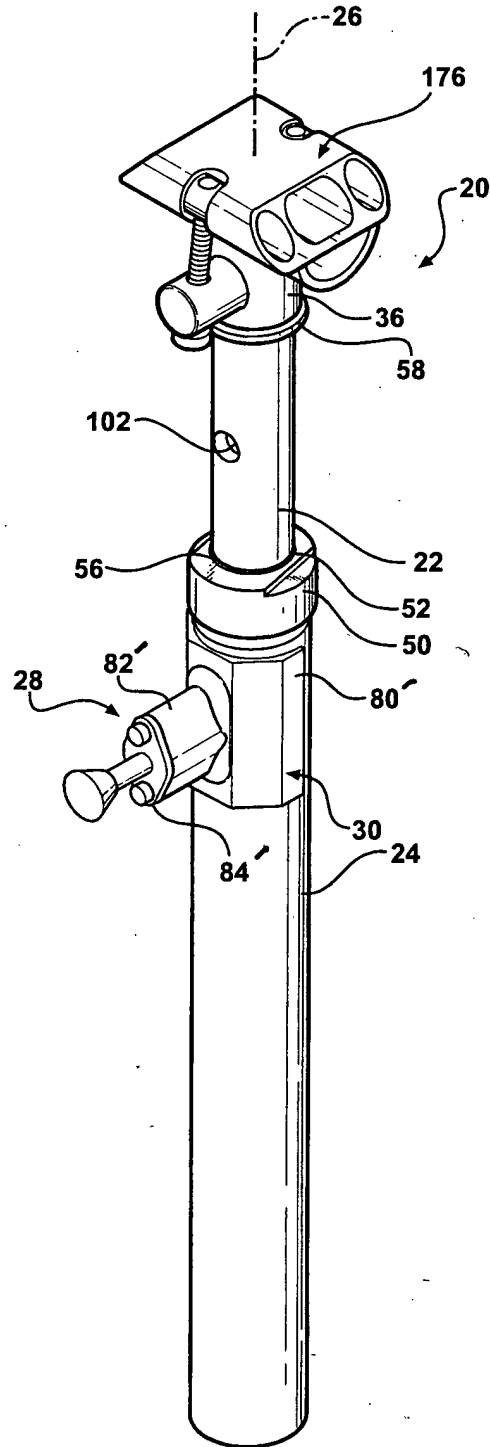


**FIG - 9**

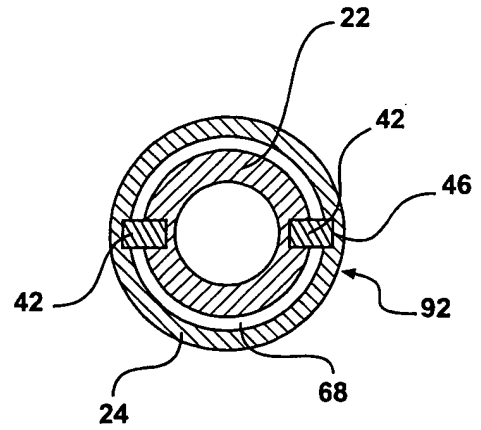




**FIG - 10**



**FIG - 11**



This diagram is a cross-sectional view of a mechanical assembly, possibly a pump or a valve. The central component is a vertical shaft (22) that passes through a housing. At the top, there is a fluid inlet (26) with a cap (36) and a seal (58). The shaft is surrounded by a series of seals and gaskets (50, 48, 62, 80, 64, 82, 174). A piston (102) is located on the shaft, and a valve (106) is positioned below it. The assembly includes a fluid outlet (20) at the bottom, which is connected to a series of horizontal passages (24) and a final outlet (72). Various other components are labeled with numbers, including 28, 114, 168, 88, 170, 132, 134, 86, 110, 108, 74, 76, 68, and 70. A dashed line (42) indicates a fluid path or a specific feature within the assembly.

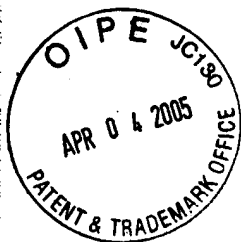


FIG - 3

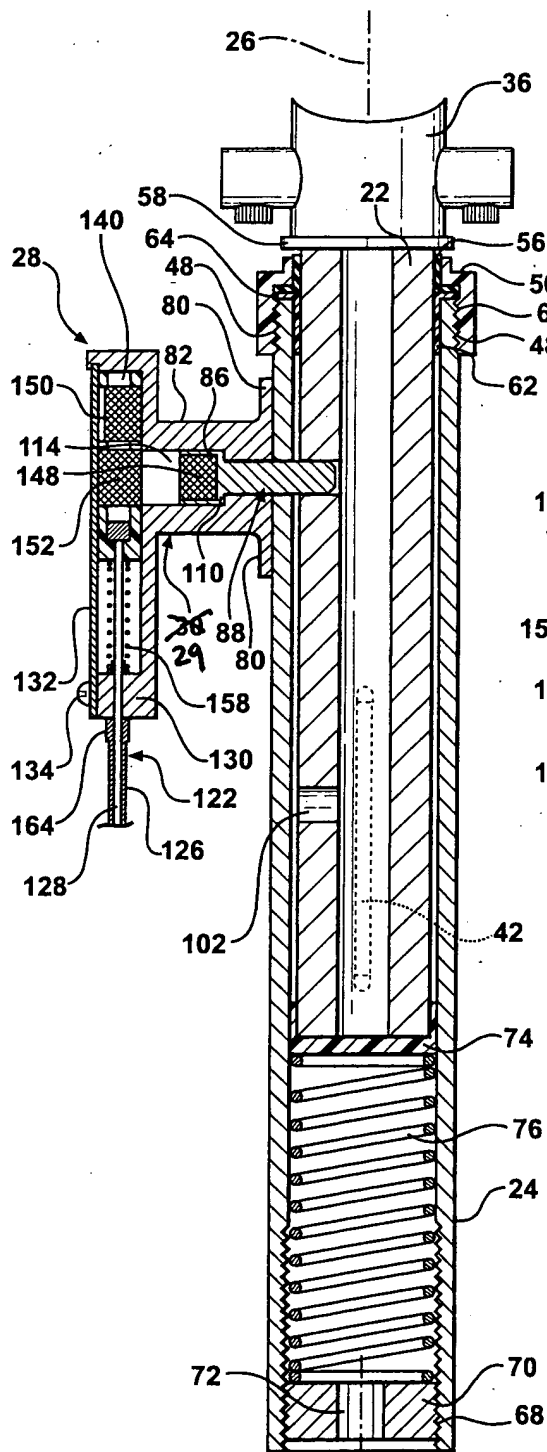


FIG - 4

